

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***COMMENTS AND RESPONSE***  
**ON THE DRAFT PERMIT**

Title V / Synthetic Minor, Operating

Permit: V-08-005

Gerdau Ameristeel US Inc.

Calvert City, KY 42029

June 30, 2008

Rita Arguello, Reviewer

SOURCE ID: 21-157-00029

AGENCY INTEREST: 2956

ACTIVITY: APE20070001

**SOURCE DESCRIPTION:**

Gerdau is a manufacturer of steel sheets from billets. The billets are heated in a natural gas reheat furnace, and the hot billets are rolled into sheets. In addition, steel recovered from the rolling operation is sold as scrap.

On December 14, 2007, Gerdau Ameristeel US Inc. (Gerdau) applied to the Division for the renewal of the Title V air permit, V-03-016. This source is major for Particulate Matter and Nitrogen Oxide. Gerdau requested to increase the time allowed to complete performance testing for the emission point 01 because of difficulties in performing the test in the winter. The EP 01 passed compliance stack testing in July, 2007. They also requested to modify the description language for the Emission Point 01 and 02.

On November 10, 2004, Gerdau notified the Division for Air Quality that North Star Steel, a Delaware corporation, was purchased by Gerdau Ameristeel US Inc., a Florida corporation.

**PUBLIC AND AFFECTED STATE REVIEW:**

Affected state Illinois was notified of the issuance of the draft permit on June 12, 2008 via e-mail. On April 29, 2008, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in the Tribune Courier in Benton, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Gerdau Ameristeel US Inc. on May 12, 2008. Minor changes were made to the permit as a result of the comments received; however the Division has concluded that the proposed operation will comply with all air quality regulations and requirements. Therefore, the Division has made a final determination to issue a proposed permit. A final permit will be issued after the U.S. EPA's 45-day review.

**COMMENTS AND RESPONSE:**

Comments on Gerdau Ameristeel US Inc. (Gerdau) Draft Title V Air Quality Permit submitted by Maxwell Lee, Ph.D., P.E. Engineer Koogler & Associates, Inc.

**Title V Permit**

1. **Section B01(01)3.b** - increased the time required to give notice to the State from 10 to 30 days. The permittee requests that the time to provide notice remain at 10 days. No change of operations or new construction or modification is allowed in this permit (as noted in Section G.4). Thus, the existing allowed time of notice 10 days should remain acceptable.

*Division's response:* Comment acknowledged, change made, 10 days is adequate notice.

2. **Section B01(01)4.a** - changed quarterly to daily visible observations. The permittee requests that the conditions of the current permit remain applicable such that quarterly visible emissions readings or visible observations be required.

*Division's response:* Comment acknowledged, change made.

3. **Section B02(02)2a** - reduced allowable PM from 40 to 30 ton/12-months. As the permittee as not proposed any modification or construction, a reduction of allowable emissions is not warranted. Please note the emissions unit has no control device and only fugitive emissions. No emissions stack or single source exist for this emission unit.

*Division's response:* Comment acknowledged, change made. PM allowable remains at 40 tons/12 months, it was a typo.

4. **Section B02(02)2b** - added mass emission standard. As noted above, the emissions unit does not include an emission point. Thus, a mass emission standard is not applicable to this fugitive Emissions source.

*Division's response:* Comment acknowledged, change made. We have removed the mass emission standard pursuant to 401 KAR 59:010, based on the fact that there is no stack on emission point B02(02). The particulate mass emission limit remains as in the previous permit since that limit was established for PSD avoidance. The emission factor from the rolling operation was calculated taking a worst case engineering estimate <sup>1</sup>. "The heavy metals present in trace quantities in the steel are considered to be emitted as particulates and not as toxics as they are bonded in the steel" <sup>2</sup>.

<sup>1</sup> Permit V-97-038 and V-03-016.

<sup>2</sup> Statement of Basis, Permit V-97-038.

5. **Section B02(02)3a&b** - added stack testing. As noted above, stack testing is not possible on this source. Please note: 401 KAR 59.010, section 3(2) only requires stack testing if the source has a stack.

*Division's response:* Comment acknowledged, change made. B02(02)3a has been removed, however, B02(02)3b remains.

6. **Section B02(02)4.b** -As no construction or modification is requested of the facility. Thus, The permittee requests that the current permit language remain.

*Division's response:* Comment acknowledged, change made.

7. **Section B02(02)6.d** - The permittee requests that the permit language be revised to the following: D. Following an exceedance the company shall continue to submit, at least once a quarter, visible emissions readings.

*Division's response:* Comment acknowledged, change made.

8. **Section B05(05)1.** - added this section. While these conditions are listed in 401 KAR 63:010, the permittee has not modified operations or requested additional construction and requests that the current permit condition listed for B05(05)1 remain.

*Division's response:* Comment acknowledged, no change made, this requirement was inadvertently left off the current permit.

9. **Section B05(05)2.** - added this section. While this condition is listed in 401 KAR 63:010, the permittee has not modified operations or requested additional construction and requests that the current permit condition listed for B05(05)1 remain.

*Division's response:* Comment acknowledged, no change made, this requirement was inadvertently left off the current permit.

10. **Section B05(05)4.** - changed this section of "daily basis." New daily monitoring requirements are listed of daily inspection for the emission unit (various paved and unpaved roads within the plant boundaries used to transport equipment, material, personnel, etc.). The current permit condition requiring "The permittee shall keep records of the dates that it swept, and applied water/dust suppressants to roadways, and these records shall be made available to the Division personnel upon request. "provides adequate and reasonable assurance to the Department that conditions listed in 401 KAR 63:010 will be complied to. As mentioned above, the emission unit is not under construction or any modification that justifies modifying this condition and the related condition 05(05)5 for logging inspections.

*Division's response:* Comment acknowledged, no change made, this requirement was inadvertently left off the current permit.

11. **Section B05(05)5.** - changed this section to require a daily log. As mentioned above, the current permit condition is adequate to comply to 401 KAR 63:010. Furthermore, the current condition specifically identifies the required data to be recorded. At a minimum, the permittee requests that the new condition have the first sentence removed as it is an ambitious requirement, open to interpretation.

*Division's response:* Comment acknowledged, no change made, this requirement was inadvertently left off the current permit. Section B05(05)5: Language has been change. Section B05(05)7 was added.

12. **Section B05(05)6.** - changed this section. The permittee requests the current permit condition remain. The new condition references Section F. Section F includes general monitoring, recordkeeping, and reporting requirements that include conditions that are not applicable to this emission unit which causes confusion as to what is actually required for this emission unit. The current permit condition is specific to the requirement for this

emission unit.

*Division's response:* Comment acknowledged, change made.

**13. Section C - Insignificant Activities List:**

The following items should be included in the list.

- 1) QA laboratory vent hood
- 2) Admin HVAC units

*Division's response:* Comment acknowledged, change made.

**14. Section C - added language of monthly inspection for those activities**

subject to an opacity standard. 401 KAR 59.010, Section 3 includes an opacity standard. The list of insignificant activities includes two columns to the right side of Generally Applicable Regulations.

Regarding 401 KAR 59:015, this regulation is applicable to indirect heat exchangers of heat input capacity of 1 mmbtu/hr or greater. None of the listed activities subject to 401 KAR 59:015 have heat input capacity of 1 mmbtu/hr or greater. Regulation 401 KAR 59:015 should be removed for the listed subject units.

In review of the insignificant activities as process operations, we note that the activities listed as subject to 401 KAR 59:010 will clearly not have opacity subject per 401 KAR 59:010. 401 KAR 59:010, Section 2 definition of Process weight states "... but does not liquid or gaseous fuels charged, combustion air, or uncombined water." If the process weight definition does not include these sources, emissions of PM or opacity should not include sources that only emit liquid or gaseous fuel vapors, combustion air (without particulate) and uncombined water. Thus, as all of the listed units subject to 401 KAR 59:010 have only possible emissions related to non-particulate matter emissions, we request that regulation 401 KAR 59:010 be removed for the listed subject units.

*Division's response:* Comment acknowledged, change made.

**15. Section C 19. typo. remove extra 19.**

*Division's response:* Comment acknowledged, change made.

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.